Executive Summary













2008 NCDOT ANNUAL PERFORMANCE REPORT

Connecting people and places in North Carolina - safely and efficiently, with accountability and environmental sensitivity

Message from the N.C. Secretary of Transportation



Dear Citizens of North Carolina:

I am pleased to present to you the first annual N.C. Department of Transportation performance report. It is a synopsis of NCDOT's activities during fiscal year 2008 and is organized around our strategic goals. It provides highlights of key initiatives and includes performance measures for all business services.

This has been a year of dramatic change for NCDOT. Rapid population growth, rising construction costs and fuel prices, the changing travel habits of North Carolinians, and other factors have demanded changes in the way this department approaches its mission. Starting in mid 2007, I designated a team of key department employees to begin a transformation of our operations based on the findings of a diagnostic conducted by McKinsey and Company. This

transformation to a 21st Century DOT, discussed in more detail at <u>www.ncdot.gov</u>, will position us to better meet the transportation demands of this state with an emphasis on safety, mobility, preservation, accountability, and environmental sensitivity.

The Division of Motor Vehicles began two major new initiatives in 2008 – central issuance of drivers licenses and e-sticker inspections. Instead of issuing driver licenses at its field offices, DMV is producing licenses, permits and identification cards at a central location and mailing them to customers to combat license fraud and ID theft in the state. The division is also changing the date of your vehicle inspection, so the inspection must occur before you will be allowed to renew your registration each year. This will decrease the number of cars skipping inspections and help improve safety and air quality.

With limited options for growing our highway system, NCDOT is focused on achieving maximum performance of our existing network and increasing support for other modes of travel. Public transportation rose dramatically statewide and NCDOT provided significant support for these systems throughout the state. This included investment in the successful new Charlotte light rail system and approval to add a new service route to the *Piedmont* rail line. NCDOT also began use of innovative financing in the form of Grant Anticipation Revenue Vehicle (GARVEE) Bonds to accelerate needed safety and mobility improvements on its most traveled roads.

While I am always proud to lead the 14,000 gifted, dedicated and professional employees of this agency, this past year has been particularly gratifying. I invite you to review this report and see how NCDOT is addressing the challenges facing North Carolina to meet the state's transportation needs for the 21st Century.

Sincerely,

Lyndo Tippett

North Carolina Secretary of Transportation

Introduction

In fiscal year 2007-08, the North Carolina Department of Transportation (NCDOT) initiated a transformation to become a results-based organization that more effectively measures and reports its organizational and individual performance. To achieve this, NCDOT has redefined its mission, goals, performance measures and measurement systems, operation plans, organization, budgets and processes.

To improve organizational effectiveness and meet the requirement of the Current Operations and Capital Improvements Appropriations Act of 2008, Section 25.4, NCDOT has identified 29 performance measures directly linked to the success of achieving our mission and five goals. To ensure success of each measure, NCDOT identified specific targets for achievement. Some measurement systems and reporting tools are further along, while others require additional attention and the development of new methods of measuring and reporting.

A Web-based performance "dashboard" has been created to continually exhibit the performance of the Department and may be found at http://ncdot.gov/programs/dashboard/. When fully implemented the performance dashboard will display current results for each Department goal and their key measurements. This annual performance report summarizes the current dashboard results and includes additional key measures that are critical in measuring organizational performance, but not yet published on the dashboard.

Although the transition to a performance measurement culture began recently, NCDOT has made considerable progress in achieving its measures and targets by demonstrating its performance through the delivery of projects, programs, services and initiatives that meet our mission, goals and values. This report highlights many of those examples and includes details on Department successes in the last fiscal year.

NCDOT is committed to continually improving our programs, projects and services through performance measures, processes, goals and targets that meet the needs of North Carolina, its citizens and the traveling public. More refined and transparent organizational measures will lead to better decision-making and a more results-oriented Department of Transportation.

Key Accomplishments in Fiscal Year 2008

- ✓ Realigned NCDOT to improve performance and accountability
- ✓ Completed 168 major projects and awarded \$850 million in new contracts
- ✓ Initiated contracts to rehabilitate/replace 133 bridges
- ✓ Constructed and/or rehabilitated 1,698 miles of road
- ✓ Used 860,699 tons of reclaimed/recycled asphalt pavement in production
- ✓ Decreased the expected growth of annual vehicle miles traveled by 75 percent since 2000, surpassing the goal of 25 percent by 2009. Public transportation ridership is expected to greatly increase this year due to:
 - The increase in frequency of passenger rail service between Raleigh and Charlotte by adding an additional train
 - o The support for the LYNX Blue Line, Charlotte Area Transit System's light rail service
- Implemented major program changes at the Division of Motor Vehicles including:
 - Central issuance of driver licenses to prevent fraud and theft
 - Electronic Inspection Program to increase vehicle safety inspection compliance and improve air quality
 - Vertical license issuance for drivers under the age of 21 to curb under age drinking and driving
- ▼ Firms certified as Disadvantaged Business Enterprises, Minority Business Enterprises, and Women Business Enterprises were paid \$360,151,233 on federally-assisted and state-funded projects for a total of 17.3 percent of the dollars paid out in FY08
- ▼ Firms certified as Small Business Enterprises were awarded \$58,182,146 and paid \$70,366,096 in department wide contracts

Overall Performance and Success of NCDOT

To measure the success of meeting NCDOT's mission and goals, key performance indicators were identified and measured in FY2008. Result details can be found at www.ncdot.gov.

Percent of key performance measures that met or exceeded expectations

75.8%



Key Performance Measures

Make	our	transp	ortation	network	safer
HIGNE	vui	ti aii 3p	oi tatioii	HICKMOIN	Jaici

	Metric	Defined Measure	Target	FY08 Result
1.1	Fatality Rate	Rate of Fatalities per 100 Million Vehicle Miles	Less than 1.63	1.53
1.2	Crash Rate	Rate of Crashes per 100 Million Vehicle Miles	Less than 233.76	230.75
1.3	Injury Rate	Rate of Injuries per 100 Million Vehicle Miles	Less than 115.56	112.37
1.4	Traffic Safety	% of Statewide Safety Belt Usage	90% or Greater	89.8%
1.5	Motor Vehicle Safety	Number of centrally issued driver licenses reducing fraudulent drivers	TBD	TBD

Make our transportation network move people and goods more efficiently

	Metric	Defined Measure	Target	FY08 Result
2.1	Highway Reliability	% of Strategic Highway Corridor Miles that have Little on No Recurring Congestion	85% or Greater	81%
2.2	Ferry Service Reliability	% of Scheduled Ferry Runs Completed	97% or Greater	98.9%
2.3	Incident Management	Average Time to Clear a Major Accident	Less than 90 minutes	90.4 minutes
2.4	Public Transportation	% Reduction in Expected Growth of Commuter Generated Vehicle Miles Traveled	25% or Greater	75%
2.5	Rail Service	% Increase in the Number of Intercity Rail Passengers	3% or Greater	6%

Make our infrastructure <u>last longer</u>

	Metric	Defined Measure	Target	FY08 Result
3.1	Pavement Condition: Interstate Routes	% of Interstate Route Miles in Good Condition	85% or Greater	78.4%
3.2	Pavement Condition: Primary Routes	% of Primary Route Miles in Good Condition	80% or Greater	65.3%
3.3	Pavement Condition: Secondary Routes	% of Secondary Route Miles in Good Condition	75% or Greater	67.6%
3.4	Bridge Health Index	% of Bridges in Good Condition	76% or Greater	67.2%
3.5	Maintenance Condition – Highway Features	Weighted Score of all Highway Features, excluding Pavement and Bridges, in Acceptable Condition	84 or Greater	79.3

Make our organization a place that works well

	Metric	Defined Measure	Target	FY08 Result
4.1	Letting Success Rate	% of Projects "Advertised for Bid" and Awarded to the Contractor for Construction on Schedule	70% or Greater	67%
4.2	Right Of Way Delivery	% of Projects that Completed Right of Way on Schedule	70% or Greater	72%
4.3	Construction Project Delivery – On Schedule	% of Active Highway Construction Projects on Schedule	70% or Greater	88%
4.4	Construction Project Delivery – On Budget	% of Active Highway Construction Projects on Budget	70% or Greater	63%
4.5	Environment Stewardship	Average Environmental Inspection Score for Construction and Maintenance Projects Statewide	7.5 or Greater	8.5
4.6	Administrative Costs	% of Administrative Costs compared to Overall Budget	Less than 10%	6.5%
4.7	Federal Billing Efficiency	% of Federal Receipts to Eligible Authority to Bill	95% or Greater	100%
4.8	Cash Management	% of Planned Expenses to Actual Receipts	+/- 5%	4.75%
4.9	DMV Service Delivery	% of Offsite DMV Services Compared to Onsite Services	TBD	TBD
4.10	DMV Service Delivery	Average Time a Customer has to Wait Before Receiving Services at a DMV Office	TBD	TBD

Make our organization a great place to work

	Metric	Defined Measure	Target	FY08 Result
5.1	Employee Safety	Employee Safety Index	Less than 9.79	6.35
5.2	Employee Hiring Process	Total Average Time to Hire Staff	TBD	TBD
5.3	Employee Engagement	% of employees that feel the Department is a great place to work	TBD	TBD
5.4	Metrics Based Performance Evaluations	% of NCDOT Leadership Positions Under New Results Based Performance Management System	100%	100%

Receipts		Expenses		Purchasing Power			
Planned to Actual Receipts		Planned to Actual Expenses		Purchasing Power of NCDOT Highway Construction Dollars (Since 2002)			
Planned	\$4,083,000,000	Planned	\$4,236,000,000	·	\neg		
Actual	\$3,966,500,000	Actual	\$3,954,500,000	2002 2003 2004 2005 2006 2007			
Variance	-2.9%	Variance	-6.6%	-20%			
				-26%			
				-33%			
				-43% -43%	\exists		
				₩-47% -44% -4	7%		
				-60%			

Forecast to Actual							
R	<u>eceipts</u>	<u>Expenses</u>		Agency Transfers			
State	\$2,887,718,885	Construction	\$1,917,798,261	Direct Transfers:			
Federal	\$857,720,402	Maintenance	\$849,668,077	General Fund	\$190,733,306		
Debt	\$114,430,648	Transit	\$201,956,280	Highway Patrol	\$199,009,403		
Local	\$53,378,953	Debt Service	\$93,193,815	Public Instruction	\$53,749,002		
Grants	\$53,205,216	Admin	\$250,796,488	Other Agencies	<u>\$16,836,177</u>		
Total \$3,966,454,104		Transfers	\$460,327,888	Total	\$460,327,888		
		State Aid & Other	\$180,761,439				
		Total	\$3,954,502,248				
Forecast	\$4,083,000,000	Forecast	\$4,236,000,000	NC Turnpike Support:			
				Admin	\$3,649,397		
Variance \$(116,545,896)		Variance	\$(281,497,752)	Construction	\$16,604,487		
				Total	\$20,253,884		
Variance %	-2.9%	Variance %	-6.6%				

Building a Better NCDOT – FY2008 Highlights

In 2007 NCDOT began an internal transformation process of changing its management culture to a new outcome-based, performance-oriented organization.

Transportation Secretary Lyndo Tippett appointed a team, along with the consultation services of McKinsey & Company, to begin this multi-year process. He asked 19 NCDOT employees to work full time on this project, with the task of designing and implementing a "transformed" NCDOT based on McKinsey's recommendations and guidance.

To ensure a successful outcome, this team strategically analyzed data from all parts of the department. Various methods of delivering projects, developing performance metrics, and preparing NCDOT for the 21st century were evaluated to ensure the most beneficial outcome and smoothest transformation to a results-based organization.



The transformation effort focused on the following areas:

Strategic Direction:

NCDOT developed a strategic direction for the department by creating new mission and goal statements and identifying strategic leadership roles. The team initiated an in-depth look at the efficiency and effectiveness of internal services and the mission and products of all departmental business units.

Planning and Prioritization:

NCDOT developed a new conceptual strategic planning and prioritization process and has engaged external partners in discussions to determine the feasibility of the new processes. The Strategic Planning Office of Transportation was created to facilitate this process.

Performance Accountability:

NCDOT has instilled performance accountability through a public facing "Performance Dashboard" that tracks departmental progress toward five goals. The dashboard is located on NCDOT's Web site at www.ncdot.gov. Top managers' individual performance assessments are tied to these same goals through a system of "metrics" or performance measurements. This allows managers to measure each business unit's contributions to meeting the mission and goals.



Program and Project Delivery:

NCDOT streamlined program and project delivery by recommending process improvements to deliver projects in the statewide Transportation Improvement Program more quickly and efficiently, improve the condition of North Carolina's bridges, and more strategically address mobility issues throughout the state.

Talent Management:

The term "talent management" refers to the way the department recruits, retains and develops its employees. Based on results of a diagnostic survey and many subsequent interviews with DOT managers and employees, NCDOT has recommended and implemented changes in these areas. NCDOT also created Core Values, the behavioral standards to which all employees will be held accountable in their individual performance evaluations. Additionally, a new employee performance management system called a "Performance Dashboard and Appraisal" has been implemented.

The transformation effort prepared NCDOT for the 21st Century by enabling us to better "connect people and places in North Carolina – safely and efficiently, with accountability and environmental sensitivity."

Building a Better NCDOT - FY2008 Highlights

Make our Transportation Network Safer

The mission of the N.C. Governor's Highway Safety Program (GHSP) is to promote highway safety awareness and reduce the number of traffic crashes in North Carolina through the planning and execution of safety programs. To meet this objective GHSP administers the statewide campaigns, "Click It or Ticket" and "RU Buckled." In FY2008, North Carolina's seat belt usage rate reached its highest to date. According to an annual



survey, the state's usage rate increased to 89.8 percent, above the national rate of 82 percent. During this year's campaigns, state and local law enforcement officers issued more then 90,000 traffic and criminal citations. The campaign began as a national pilot project in 1993 to increase seat belt usage and child passenger safety through stepped-up enforcement of the state's seat belt and child safety seat laws. The state's usage rate was 65 percent when the program began 15 years ago. In 2003, the National Highway Traffic Safety Administration adopted the campaign as a national model that is now used in more than 40 states.

Make our Transportation Network Move Goods and People More Efficiently

Last year Governor Easley announced that a third intercity passenger train between Charlotte and Raleigh



will be added to the current service to help meet growing demand as well as ridership increases. The new train service will run at midday, with departures from Raleigh and Charlotte. Ridership in the state has increased steadily since service began in 1990, with more than 635,000 passengers using the train to travel to or from North Carolina each year. For the past several years, the *Carolinian*, one of two trains that NCDOT sponsors, has been one of Amtrak's top-performing trains in terms of cost recovery. Numbers of passengers on the other state-sponsored train, the *Piedmont*, also have risen steadily since service began in 1995 – from nearly 26,000 passengers in its first year of operation to more than 60,000 during federal fiscal year 2008.

Make our Infrastructure Last Longer

In 2005, NCDOT embarked on the development of **performance measures for its highway maintenance and operations** functions. These performance measures were established to communicate a statewide strategy for long-term preservation and efficient highway system operation to both our internal workforce and our external customers. Outcome-based performance measures, such as amount of low shoulder present or linear feet of guardrail damaged, demonstrate the health and safety of the highway system, and by rolling all of these performance measures up into a Level of Service score comparison between regions and areas can be done. It also demonstrates the funding level needed to provide a specific level of service. The performance measures and targets developed in 2005 were included in the department's first ever Performance Based Maintenance Contract which began in the Charlotte area in July 2007. The contractor, Infrastructure Corporation of America, was tasked with maintaining 131 miles of interstates in the Charlotte area to the performance targets developed by NCDOT. By tasking the contractor with achieving the same performance targets, the department can determine if these standards are in fact achievable and at what cost.

Make our Organization a Place that Works Well

In winter 2008, NCDOT replaced seven bridges along NC 12 on Ocracoke Island through an expedited unique project that resulted from extensive planning with the community and innovative construction practices. The existing bridges along NC 12 on Ocracoke Island were functionally obsolete, timber structures that required continual maintenance. After much discussion with the local community, an agreement was made to close the road between New Year's Day and Easter, when tourism is at its slowest, and replace all



seven bridges within a 75-day window of opportunity. The road was closed for only 65 days and reopened to traffic on March 5, 2008, 10 days ahead of schedule.

Make our Organization a Great Place to Work

Crew Members of the *Hatteras Inlet Ferry* assisted with a medical emergency. A 10-month-old child in the line of vehicles waiting for the next ferry trip was in need of medical attention. The captain immediately returned to the

dock while his crew removed a vehicle from the ferry so the vehicle carrying the ill child could board. An ambulance met the mother and infant close to the ferry ramp.

MV Floyd J. Lupton Captain Pete Avery, Crew Mate Sonny Golden, Chief Clifton Graham, Oiler Elbert Jones and Crewmember Ritchie Smith responded to a call from the Coast Guard for assistance during a thunderstorm to rescue a woman whose boat had lost its sails and could not gain steerage. Avery positioned the ferry between the wind and the distressed boat and provided a break for the boat to recover its sails and engage its outboard motor.



MV Floyd J. Lupton Crew

6

NCDOT IMAP Driver Jimmy Brown came upon a driver who had broken down on the side of I-440 in Raleigh. Brown took the woman's two young daughters and mother to a safe place while she stayed in the car to wait for a tow truck. Within minutes the car was struck from behind. The woman was hospitalized for a few days; however, it could have been worse as the two child safety seats in the back were crushed.

NCDOT Electronics Technician Leslie Newbern came upon a serious accident where a vehicle was on fire and the driver was seriously injured and unresponsive. He entered the truck, stabilized the victim until help arrived and checked for fire in the cab.

NCDOT State Intelligent Transportation System Travel Information Engineer Jo Ann Oerter received a "2008 Coalition Champion Award" for her dedication and commitment to the I-95 Corridor Coalition. The honor recognized her efforts to coordinate and enhance traveler information throughout the I-95 corridor.



NCDOT IMAP driver providing motorist assistance

FY2009 and Beyond

Key Transportation Facts

On the Ground

- 9,061,032 estimated population
- · 6.5 million licensed drivers
- 6,747,163 registered passenger vehicles
- 8.5 million registered vehicles
- 103,598 million miles traveled per year
- 1,696,542 trucks on the road per year
- 1,109 miles of Interstate highways
- 13,762 miles of primary highways
- 64,391 miles of secondary highways
- 18,018 structures and bridges statewide
- 106 transit systems
- 5.5 million people have access to transit
- 550,000 rail passengers

In the Air

- 74 publicly-owned airports
- 300 privately-owned airports and heliports
- 47 million passengers served
- 7,000 registered aircraft
- 800 million pounds of air freight
- \$11.8 billion economic impact

On the Water

- 24 ferries, second largest in the nation
- 2.4 million passengers carried annually
- 1 million vehicles carried annually
- · Seven ferry routes along the state's coast

The economic prosperity the state has enjoyed for several years has placed a higher demand on the entire transportation network. North Carolina has undergone a transition from an economy based on the traditional industries of tobacco, furniture and textiles to one increasingly driven by knowledge-based enterprises.

This success translates into a population increase, which is among the highest in the country, along with a higher use of the transportation system. The amount of freight moving within the state, as well as to and from the state, has increased as a result of the economic prosperity.

This growth has occurred at a time when construction costs have skyrocketed due to inflation and national and international demand.

State revenues have not been able to keep pace with the growing demand. The result is more congestion with less new miles of roadway to address needs and the deterioration of the existing transportation infrastructure.

A strong transportation system is vital to North Carolina's economic prosperity and high quality of life for our citizens. Growing demands on our system coupled with decreasing funding make it increasingly difficult to meet the 21st century transportation needs of our state. NCDOT is addressing this challenge by transforming to be more accountable in delivering a safe, efficient and long lasting multimodal transportation network.

A detailed report on NCDOT's performance can be found at: www.ncdot.gov/programs/dashboard/content/#2008Performance



Connecting people and places in North Carolina – safely and efficiently, with accountability and environmental sensitivity



150 copies of this public document were printed at a cost of \$204.00 or \$1.34 each. 1/9/2009.